

KWPCRF Cost and Effectiveness Supporting Information Form
(Small Systems)
KWPCRF Project No. C20 xxxx 01

The Water Resources Reform and Development Act (WRRDA) includes the following Section 602(B)(13) applicable to the state Clean Water SRF beginning October 1, 2015

“Section 602 (B) (13) – beginning in fiscal year 2016, the State will require as a condition of providing assistance to a municipality or intermunicipal, interstate, or State agency that the recipient of such assistance certify, in a manner determined by the Governor of the State, that the recipient –

- (A) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under this title; and
- (B) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account –
 - (i) the cost of constructing the project or activity;
 - (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and
 - (iii) the cost of replacing the project or activity”

This two page support memo provides the necessary certifications review statements as required by the KWPCRF to document this “cost and effectiveness” review requirement for the referenced project. In each case the City/Applicant must check the applicable statements as listed below, and indicate “NA” for any subjects Not Applicable to the KWPCRF project as funded.

1. Major Sewer Rehabilitation

_____ The project does not include any sewer line or manhole rehabilitation measures.

_____ The project includes sewer line and/or manhole rehabilitation. As per KDHE program direction, reducing sewage flows by reducing I/I in the collection system will inherently reduce energy use by reducing pumping costs and costs of treatment. A detailed analysis is not needed and was not prepared.

_____ There is no water use by gravity sewers. A detailed analysis is not needed and was not prepared.

2. Sewage Pumping Stations

_____ The project does not include any sewage pumping stations construction or rehabilitation. As per KDHE program direction the necessary capacity for pumping is determined by peak design sewage flow and the specific

head conditions which then dictate energy use needs for pumping. A detailed analysis is not needed and was not prepared.

_____ The design is encouraged to incorporate VFDs on the pump motors. (Check the space if VFDs are included in the design.)

_____ The design is encouraged to incorporate high efficiency design motors (NEMA Premium Efficiency) (note, smaller Hp motors may not be available as high efficiency designs). (Check the space if high efficiency design motors are included in the design.)

_____ There is no potable water use at these sewage pumping stations, except perhaps wash down at larger stations. Wherever potable water supply is provided to a sewage pumping station, backflow prevention must be provided in the design and construction. (Check the space if potable water supply to a sewage pumping station with backflow prevention is included in the design.)

3. Regionalization

_____ The Preliminary Engineering Report (PER) must give serious consideration to abandoning the existing WWTP, if regionalization with a nearby wastewater treatment facility is at all feasible. A review has been completed and submitted to KDHE within the PER.

4. Non-discharging lagoons

_____ The project does not include a non-discharging lagoon in the design.

_____ The project includes a non-discharging lagoon in the design. As per KDHE program direction, this is a natural treatment process using sun and wind and using zero electricity (other than pumping) and zero natural gas (none needed for space heating, as these small lagoons do not have buildings). The only energy use is in fuel to mow the grass, which leaves no opportunity or need for this analysis. A detailed analysis is not needed and was not prepared.

_____ There is no water use by non-overflowing lagoons, and water reuse of the relatively small quantities of treated effluent available is openly allowed by agricultural crops if any farmer desires. A detailed analysis is not needed and was not prepared.

5. Discharging lagoons –

_____ The project does not include a discharging lagoon in the design.

_____ The project includes a discharging lagoon in the design. As per KDHE program direction, this is a natural treatment process using sun and wind and using zero electricity (other than pumping) and zero natural gas (none needed for space heating, as these small and even the larger lagoons do not have buildings). The only energy use is in fuel to mow the grass and taking/transporting the sample, which leaves no opportunity or need for this analysis. (It should be noted it is expected very few new or expanded discharging lagoons will be permitted in the future by KDHE due to more stringent water quality standards). A detailed analysis is not needed and was not prepared.

_____ There is no water use by discharging lagoons, and water reuse of the relatively small quantities of treated effluent available is openly allowed by agricultural crops if any farmer desires. A detailed analysis is not needed and was not prepared.